Department of Defense
INSTRUCTION

NUMBER 6055.8
March 31, 1989

Administrative Reissuance Incorporating Change 1, May 6, 1996

USD(A&T)

SUBJECT: Occupational Radiation Protection Program

References: (a) DoD Instruction 6055.8, "Occupational Radiation Protection Program," September 29, 1987 (hereby canceled)
(b) United States Environmental Protection Agency (USEPA), "Radiation Protection Guidance to Federal Agencies for Occupational Exposure," January 1987
(c) DoD Directive 4715.1, "Environmental Security," February 24, 1996
(d) DoD Directive 5124.2, "Assistant Secretary of Defense (Force Management and Personnel)," March 13, 1989
(e) DoD Instruction 6055.1, "DoD Occupational Safety and Health Program," October 26, 1984
(f) DoD 6055.5-M, "Occupational Health Surveillance Manual," July 1982, authorized by DoD Instruction 6055.5, January 10, 1989
(g) Title 42, United States Code, Section 2011, et seq., "Atomic Energy Act of 1954," as amended (10 CFR 19 and 20)

1. REISSUANCE AND PURPOSE

This Instruction reissues reference (a), implements reference (b), supplements reference (c), and updates procedures for the occupational radiation protection program for the Department of Defense.

2. APPLICABILITY AND SCOPE

This Instruction:

2.1. Applies to the Office of the Secretary of Defense (OSD), the Military Departments (including the Reserve components), the Joint Staff, the Unified and Specified Commands, the Defense Agencies, the DoD Field Activities, and the Army and Air Force Exchange Service (hereafter referred to collectively as "DoD Components").

2.2. Applies during peacetime to all DoD civilian and military personnel who are exposed to ionizing radiation worldwide, except personnel who, as patients, undergo diagnostic or therapeutic radiological procedures in medical or dental treatment facilities.

3. DEFINITIONS

3.1. Ionizing Radiation (hereafter referred to as "Radiation"). Any electromagnetic or particulate radiation capable of producing ions, directly or indirectly, in its passage through matter.

3.2. Occupational Exposure. Routine exposure of DoD personnel to radiation associated with DoD operations during performance of their official duties. DoD personnel who infrequently, or only incidentally, enter areas where radiation is present are not considered to be occupationally exposed.

4. POLICY

It is DoD policy to reduce exposures to radiation associated with DoD operations to a level as low as reasonably achievable (ALARA). This Instruction applies to any DoD personnel who may be exposed to radiation in the course of routine duties and to those who may have been exposed as a result of accident or other extraordinary circumstances.

5. RESPONSIBILITIES

5.1. The Deputy Under Secretary of Defense (Environmental Security) (DUSD(ES)), consistent with DoD Directive 5124.2 (reference (d)), shall:

5.1.1. Provide policy guidance and coordination on radiation protection matters within the Department of Defense.

5.1.2. Serve as the principal point of contact for the Department of Defense with Federal and State regulatory agencies that control occupational and environmental exposure to radiation.

5.2. The Heads of DoD Components that conduct operations involving occupational radiation exposure shall establish and maintain radiation protection programs to implement this Instruction, consistent with DoD Directive 4715.1 (reference (c)), and shall ensure that unnecessary exposure is avoided.

6. PROCEDURES

6.1. The DoD Components' radiation protection programs shall, as a minimum, conform to the 10 recommendations provided to Federal agencies by the USEPA (reference (b)).

6.2. Additionally, the following program elements are also necessary:

6.2.1. Dosimetry and Monitoring. Appropriate area and environmental radiation measurement, personnel dosimetry, bioassay, and calibration programs shall be integral parts of the DoD Components' radiation protection efforts. Personnel dosimetry shall be required if there is reasonable probability of exceeding 10 percent of the occupational dose equivalents in reference (b) for external radiation exposure.

6.2.2. Inspections, Reports, and Abatement. The DoD Components shall have procedures for the identification, reporting, and abatement of radiological hazards in the workplace. When applicable, the DoD Components shall follow procedures in DoD Instruction 6055.1 (reference (e)) to prioritize hazard abatement projects.

6.2.3. Surveillance and Recordkeeping

6.2.3.1. Personnel. DoD Components shall follow the applicable medical surveillance procedures in DoD 6055.5-M (reference (f)) and shall follow the applicable recordkeeping requirements in 10 CFR 19 and 20 (reference (g)) for all DoD personnel included in a dosimetry program, as well as for contractor employees, other Federal employees, and frequent visitors potentially exposed to DoD-licensed radiation sources. DD Form 1141, "Record of Occupational Exposure to Ionizing Radiation," shall be used to record occupational radiation doses and shall become a permanent part of the worker's medical record. Alternatively, occupational radiation doses may be centrally recorded and a computer-generated form containing the same

information as the DD Form 1141 provided for inclusion in individual medical record jackets at reasonable intervals.

6.2.3.2. Facilities. DoD Components shall identify buildings, structures, storage areas, or other facilities in which radioactive materials (excluding nuclear weapons) are located and shall establish records to reflect the location and nature of such materials.

6.2.3.2.1. Exemptions to this requirement exist when the only radioactive materials used within a facility are as follows:

6.2.3.2.1.1. Transient sealed sources.

6.2.3.2.1.2. Sources not exceeding the exempt quantities or concentrations of sections 30 and 70 of reference (g).

6.2.3.2.1.3. Generally licensed or exempt sources under section 31 of reference (g), which are not installed in the building either structurally or as a fixture.

6.2.3.2.1.4. Unsealed sources with short half lives used in medical facilities.

6.2.3.2.1.5. Insignificant sources such as compasses, dials, gauges, electron tubes, or smoke detectors that would not require the facility to be posted as a radiation hazard area.

6.2.3.2.2. If such facilities need to be decommissioned or excessed, the DoD Components shall determine if the facility has been contaminated radio-logically and, if necessary, conduct appropriate decontamination before decommissioning or excessing the facility.

6.2.3.2.3. Records of information important to the safe and effective decontamination of the facility shall be maintained and should include, but not be limited to, the following:

6.2.3.2.3.1. Records of spills or other unusual occurrences involving the spread of radioactivity in and around the facility. Those records may be limited to instances when significant contamination remains after any cleanup procedures or when there is reasonable probability that contaminants may have spread to inaccessible areas; i.e., as in the possible seepage into porous materials such as

concrete. Those records must include any known information on identification of involved nuclides, quantities, forms, and concentrations.

6.2.3.2.3.2. As-built drawings and modifications of the facility including locations of possible inaccessible contamination such as buried pipes that may be subject to contamination. If drawings are not available, the DoD Component shall substitute appropriate records of available information concerning such facilities.

6.2.4. Job Assignment. Pregnant women shall be offered reassignment, for the duration of pregnancy, from specific tasks that are likely to result in a total dose to the unborn child of 0.5 rem, or more. Reassignment shall entail no loss of job security or economic penalty to the worker. Pregnant women shall be encouraged to advise their supervisors promptly that they are pregnant so that the total dose to the unborn child may be limited.

6.2.5. Self-Evaluation . DoD Components shall develop procedures to evaluate the effectiveness of their radiation protection programs at all levels and shall establish auditing and appraisal programs that emphasize ALARA reviews of the workplace.

7. EFFECTIVE DATE AND IMPLEMENTATION

This Instruction is effective immediately. Forward one copy of implementing documents to the Deputy Under Secretary of Defense (Environmental Security) within 120 days.

DAVID J. BERTEAU
Deputy Assistant Secretary
(Resource Management & Support)